

INCIDENT MANAGEMENT PLAN (IMP)

with

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

BRIDGETON LANDFILL

Prepared for:

**BRIDGETON LANDFILL, LLC
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MO 63044**

Prepared by:

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CEC Project No. 131-178

June 10, 2015

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1.0 INTRODUCTION

Like many industrial activities, operation and maintenance of municipal waste landfills includes risk. At the Bridgeton Landfill, these risks can result from the use of large mobile and stationary equipment, handling of combustible materials, and the management of waste byproducts such as decomposition gases and liquid leachate.

A recognized heat-generating event is occurring within a portion of the solid waste disposal area. Such heat-generating events can increase the potential hazards and the likelihood of an incident. An Operation, Maintenance, and Monitoring (OM&M) Plan has been submitted to the MDNR separately to describe special observations and preventative maintenance procedures, which Bridgeton Landfill personnel are implementing. The OM&M Plan requires that monitoring and work activity reports be generated and submitted to the MDNR, allowing constant tracking of the status of the heat-generating event.

In addition to the above document, the facility is required to have various spill prevention plans, leachate treatment and handling protocols, surface water management plans, and air quality plans. All of these plans can be found at the facility office.

This Incident Management Plan (IMP) describes plans to prevent incidents, required protocol for initial incident emergency calls, coordination of responses, and resumption of normal activities (in case of interruption). The IMP has been prepared by Bridgeton Landfill with the cooperation of appropriate regulatory authorities and local emergency responders.

Bridgeton Landfill creates, stores, and disposes of leachate as part of its operation. Constituents contained in the leachate have, at times, exceeded levels at which it be classified as a hazardous waste in accordance with the Code of Federal Regulations (CFR) Part 261. Specifically, some of the leachate has occasionally exceeded the hazardous threshold for benzene which carries the waste code D018. Therefore, the facility needs to be operated in compliance with the requirements applicable to a hazardous waste generator (40 CFR part 262) including certain provisions of 40 CFR Part 265. As such, this IMP has also been developed to meet the requirements of CFR 265, Subpart D – Contingency Plan and Emergency Procedures, since those procedures are inclusive of contingency planning and emergency response procedures applicable to either a generator or a treatment, storage, or disposal facility.

The remainder of this IMP is comprised of the following sections:

- 2.0 Description of Bridgeton Landfill – Location, access, size, and facilities are described.
- 3.0 Definitions – Defines significant terms used in the IMP.
- 4.0 Incident Prevention – Describes measures for incident prevention, assignment of Emergency Coordinators, and communication and coordination with Regulatory and Local Authorities.
- 5.0 Response and Incident Strategies – Presents response scenarios for a number of identified potential incidents.
- 6.0 Resumption and Restoration – In the case of service interruptions, this section describes the process for resuming operations including regulatory approvals.
- 7.0 Amendment of Plan – Describes the frequency and process for updating and amending the IMP.

2.0 DESCRIPTION OF BRIDGETON LANDFILL

Bridgeton Landfill is an inactive municipal solid waste landfill located at 13570 St. Charles Rock Road in Bridgeton, Missouri (see attached site location map, Figure 1). The site was formerly mined for limestone, resulting in large, open pits which were over 200 feet deep. Beginning in the 1940's or 1950's, portions of the property were backfilled with municipal wastes, industrial wastes, and construction and demolition debris. Landfill operations ceased in 2005.

The recent permitted disposal area (see Figure 2 for location) covers about 52 acres of the 214-acre property and is the main focus of this IMP. In addition, a concrete mixing plant, a waste transfer station, two legacy disposal areas and many appurtenant features are present on the site property. See Figure 2 for the facility layout and access.

Although the landfill is inactive, many activities are occurring at the facility including:

- Placement and maintenance of cover materials;
- Collection, management, and destruction of landfill decomposition gas;
- Generation, storage, and treatment of leachate;
- Collection and disposal of landfill leachate; and
- Operation of a waste transfer station, at which waste is transferred from small local collection trucks into large long-haul trucks for transportation to a remote landfill.

When waste material decomposes, a biological process increases its temperature and produces combustible gasses (primarily methane). Portions of the Bridgeton Landfill are experiencing higher-than-typical temperatures resulting from a possible heat-generating (exothermic) event taking place within the waste. Many things can produce a heat-generating event, and heightened monitoring and maintenance of the facility is required to control the heat-generating event.

3.0 DEFINITIONS

<u>Facility Emergency Coordinator</u>	Bridgeton Landfill person identified with the responsibility for initial assessment and coordination of response activities with regulatory and local authorities.
<u>Incident Commander</u>	Representative of governmental emergency response agency to which all other responders report.
<u>Regulatory Authorities</u>	Governmental agencies responsible for permitting and regulation of activities associated with, or affected by, the landfill. These include: the MDNR, the St. Louis Metropolitan Sewer District (MSD), the U.S. EPA, St. Louis County Department of Health (DoH), and the Federal Aviation Authority (FAA).
<u>Local Authorities</u>	Parties that have a role or interest in emergency response including: Local Fire Departments, St. Louis County Local Emergency Planning Committee, Lambert-St. Louis International Airport, and the City of Bridgeton.
<u>Level 0 Incident</u>	An incident that can be handled entirely by on-site Bridgeton personnel and equipment. In some cases, notification to emergency responders and/or regulatory personnel may be necessary.
<u>Level 1 Incident</u>	An incident that requires assistance of local authorities to remedy. May include potential harm to life, safety, or health of on-site personnel.
<u>Emergency Command Center</u>	A location identified for use during a Level 1 Incident. The location would serve as the control center for the Emergency Coordinator, Incident Commander, Regulatory Authorities, Local Authorities, and media relations.

4.0 INCIDENT PREVENTION

Bridgeton Landfill personnel work hard to prevent potential hazards from becoming incidents. Many voluntary and required programs and documents are used to minimize hazards and protect employee and public health and safety. A partial list follows:

Missouri Department of Natural Resources Solid Waste Disposal Operating Permit #118912

This permit and referenced permit application documents govern the previous operation and the current closure and post-closure activities at the site. Compliance with the applicable strict state solid waste regulations ensures a high level of due care with respect to the landfill facility. These documents are available at the site office.

Bridgeton Landfill Health and Safety Plan (HASP)

This site-specific plan details safety protocols. The HASP focuses on the specific health and safety hazards that are related to working in and around a landfill and requires landfill personnel be OSHA trained if performing certain tasks.

Bridgeton Landfill Operation, Maintenance, and Monitoring Plan (OM&M Plan)

A recognized heat-generating event is occurring within a portion of the solid waste disposal area. Such heat-generating events can increase the potential hazards and the likelihood of an incident. The OM&M Plan describes special observations and preventative maintenance procedures, and Bridgeton Landfill personnel are implementing these procedures. The OM&M Plan requires that monitoring and work activity reports be generated and submitted to the MDNR, allowing constant tracking of the status of the heat-generating event.

In addition to the above documents, the facility is required to have various spill prevention plans, leachate treatment and handling protocols, surface water management plans, and air quality plans. All of these plans can be found at the facility office.

5.0 RESPONSE AND INCIDENT STRATEGIES

An “incident” is a situation that is non-routine or is anomalous and which poses a threat to the health and safety of facility personnel or the public, or which may develop into such. Bridgeton Landfill has designated a Facility Emergency Coordinator who is responsible for determining if a situation rises to the level of an incident (see Table 1 for Facility Emergency Coordinator designation as well as other responsible parties).

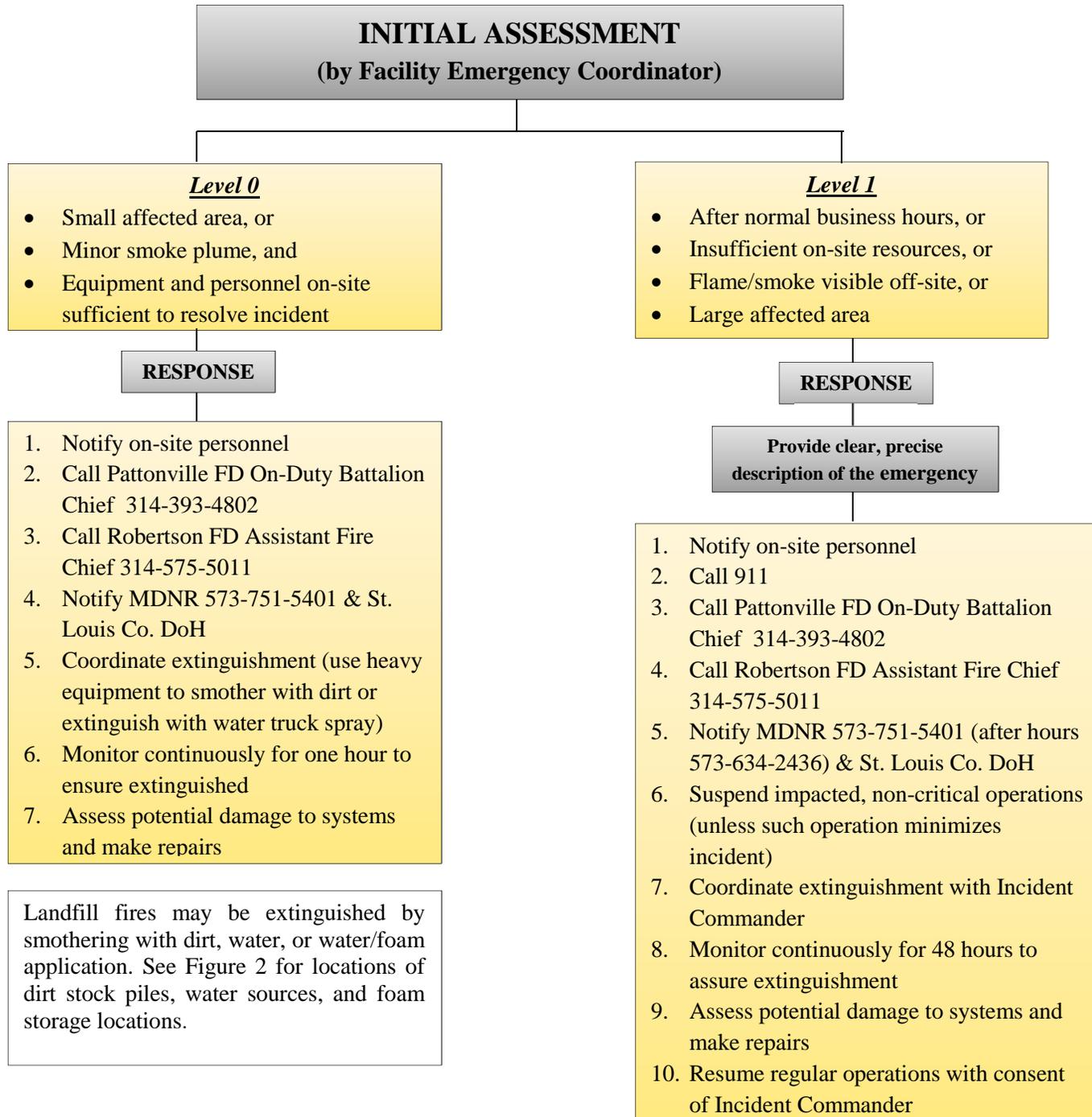
When an incident occurs, the Facility Emergency Coordinator will make an initial assessment of the severity of the incident and classify it as Level 0 or Level 1 (see definitions in Section 3.0 of this Plan) based on the nature of the incident. Depending on the severity of the incident, regulatory and local authorities become involved. A checklist of some of the important incident management steps to be taken by the Facility Emergency Coordinator is presented in Attachment A. At this time, identified potential incidents at the Bridgeton Landfill fall into one of the following categories:

- Surface Fire;
- Personal Injury – Man Down /Personnel Contamination;
- Sudden Waste Movement; and
- Leachate Release

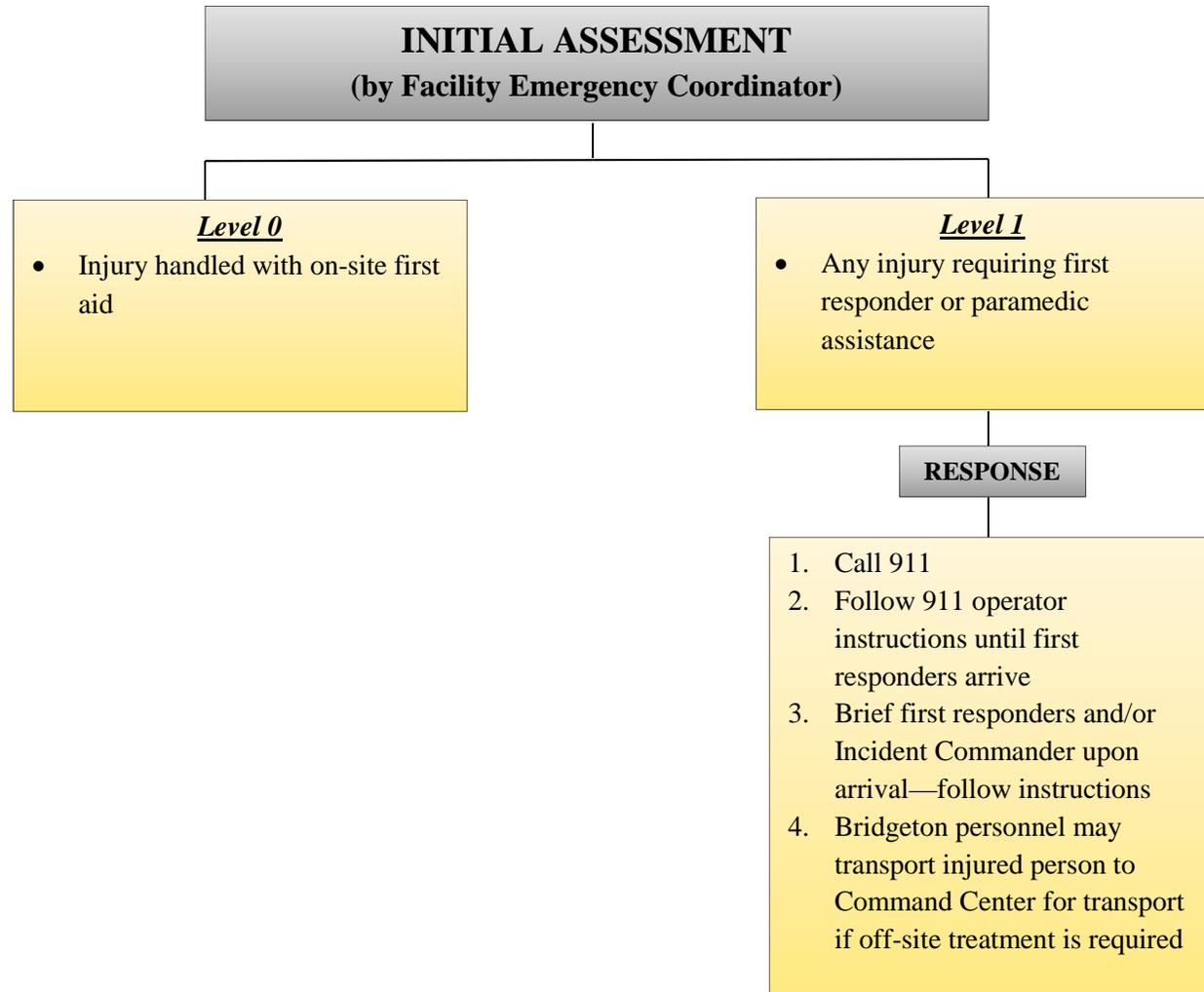
Site entrances are shown on the attached Figure 2; evacuations, if necessary may be made at any of these entrances. Internal communications are provided to appropriate facility personnel through two-way radio or cell phones. In the event of an emergency or required response or evacuation, the radio-equipped personnel will circulate the facility to provide appropriate notifications.

The following pages contain the response and incident strategies for each of these potential incidents.

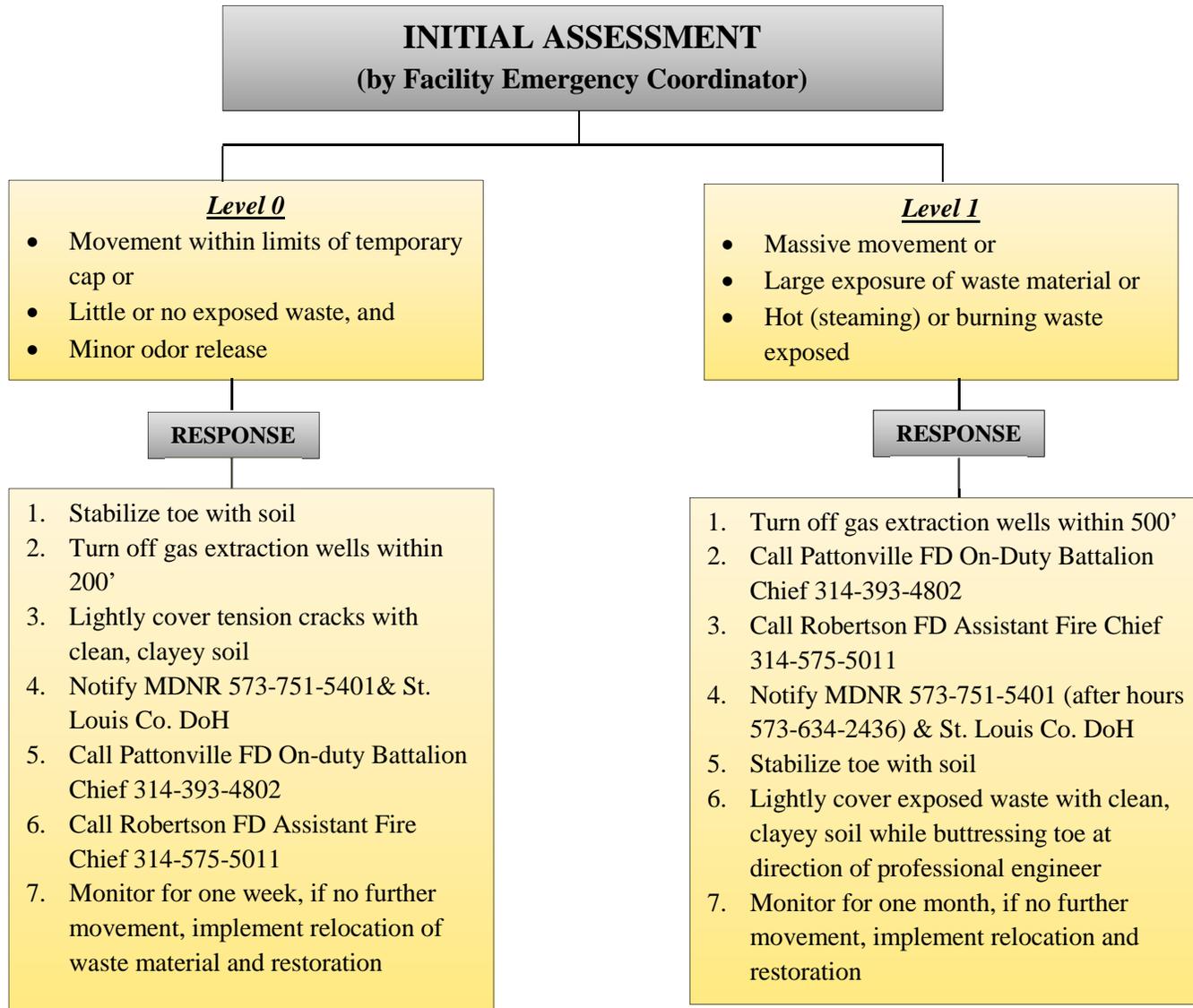
INCIDENT – SURFACE FIRE



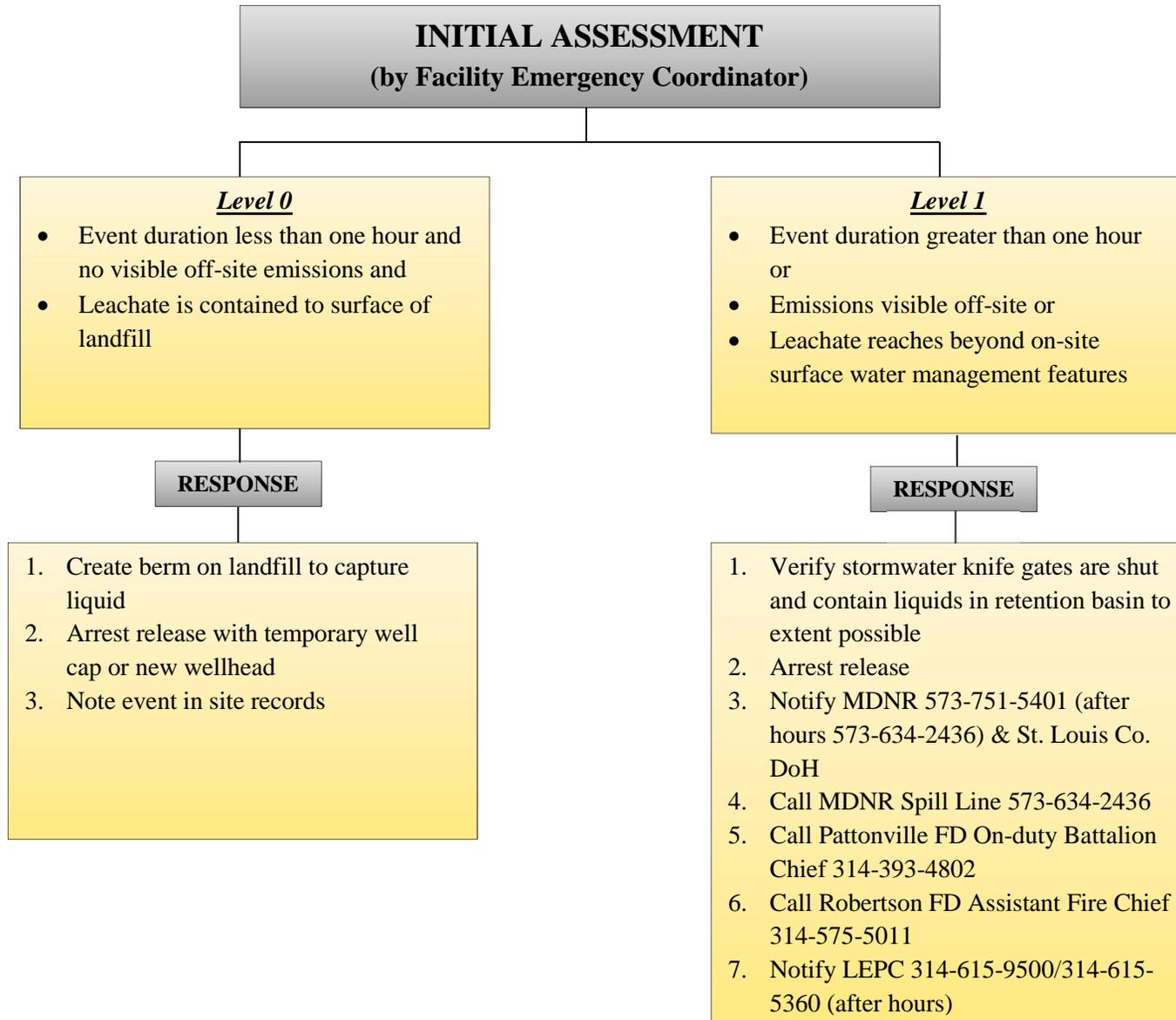
INCIDENT – PERSONAL INJURY MAN DOWN / PERSONNEL CONTAMINATION



INCIDENT – SUDDEN WASTE MOVEMENT



INCIDENT – LEACHATE RELEASE



*A leachate release may be assumed to be hot (scalding) hazard and may also be accompanied by odors and release of substances into surface water – see appropriate Incident Responses in this IMP.

6.0 RESUMPTION AND RESTORATION

Severe incidents could result in damage to facility infrastructure or an interruption in maintenance activities or operation of the transfer station. Bridgeton Landfill has ongoing retention agreements with a number of third-party contractors. These contractors can assist with restoration of critical site operation and maintenance functions.

In cases of Level 1 incidents, the Incident Commander will be involved in the decision and timing of resumption of activities. Restoration will be coordinated with the MDNR so that the landfill facility meets requirements.

In case of damage to equipment, follow all provisions of 40 CFR 265.196 regarding inspection, return-to-service, and certification of major repairs to any damaged equipment that has resulted in a release of a regulated substance. All emergency equipment listed in this plan must be replaced or cleaned and fit for its intended use before operations are resumed. Properly dispose of contaminated materials and personnel protective equipment.

7.0 AMENDMENT OF PLAN

This plan will be reviewed, and amended, if necessary, whenever:

- Applicable regulations are revised;
- The plan fails in an emergency;
- The facility changes its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;
- Upon request/input of regulatory authorities;
- The list of emergency coordinators changes; and/or
- The list of emergency equipment changes.

TABLES

BRIDGETON LANDFILL

Incident Management Plan

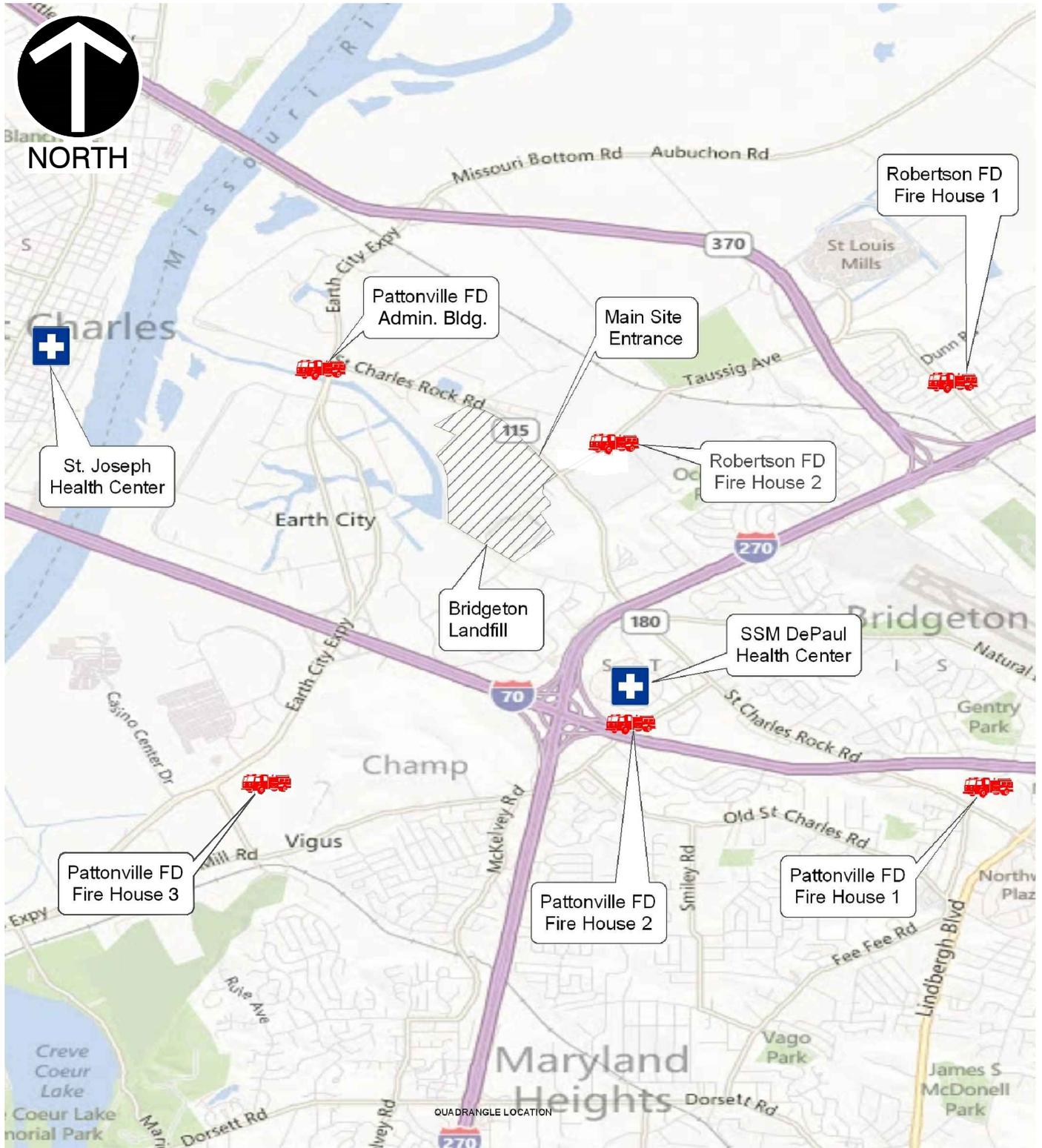
TABLE 1

RESPONSIBILITIES AND CONTACTS* (updated May 20, 2015)	
Primary Emergency Contact – Dial 911	
<i>Site Personnel – 13570 St. Charles Rock Road, Bridgeton, MO 63044</i>	
Facility Emergency Coordinator	Derek Bouchard Office: (314) 744-8172 Cell: (314) 302-3634
Alternate Emergency Facility Coordinator	Brian Power Office: (314) 744-8165 Cell: (618) 410-0157
Alternate Emergency Facility Coordinator	Tim Johnson Office: (314) 744-8190 Cell: (818) 434-8494
<i>Regulatory Authorities</i>	
MDNR–Solid Waste Management Program-- Operations	Brenda Ardrey Office: (573) 526-9940 Cell: (573) 353-3543
MDNR–Solid Waste Management Program-- Director	Chris Nagel Office: (573) 751-5401 Blackberry: (573) 680-5146 Cell: (573) 690-5371
MDNR–Environmental Emergency Response (Spill Line)	Hot Line: (573) 634-2436
MDNR–Environmental Emergency Response – St. Louis Region -- Route 66	Skip Rickets Cell: (314) 608-5656
St. Louis County Department of Health	Laura Yates Office: (314) 615-4035 Cell: (314) 609-2576
<i>Local Authorities</i>	
Robertson Fire Dept.	Maynard Howell – Asst. Fire Chief Cell: (314) 575-5011
Pattonville Fire Dept.	Battalion Chief (Primary Contact) Cell: (314) 393-4802 Matt Lavanchy (Secondary Contact) Cell: (314) 393-4807 Office: (314) 739-3118
St. Louis County Local Emergency Planning Committee (LEPC)	Mark Diedrich – LEPC Coordinator Office: (314) 615-9500 Bureau of Communications 24/7 Emergency: (314) 615-5360
<i>Other Contacts</i>	
SSM DePaul Health Center	(314) 344-6000
St. Joseph Health Center	(636) 947-5000
National Response Center	(800) 424-8802
EPA Region VII	(913) 236-3778

FIGURES



NORTH



P:\2013\131-178\CADD\Draw\Incident Management Plan (MP)\121337-E200.dwg[FIG 1] LS:(24/04/2014 - mpeake) - LP: 5/2/2014 2:13 PM



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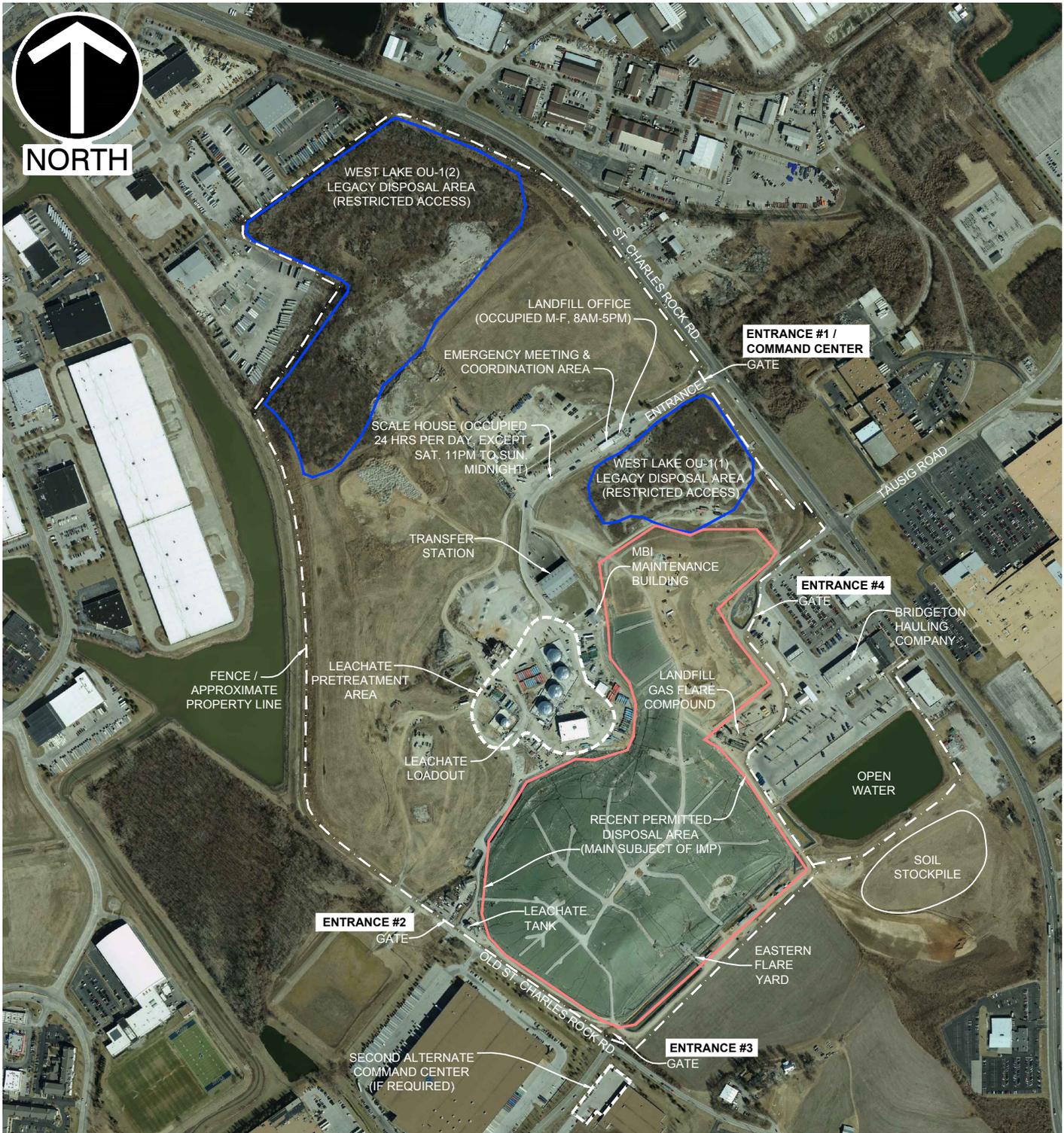
www.cecinc.com

BRIDGETON LANDFILL, LLC
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MISSOURI

FACILITY LOCATION

DRAWN BY:	JMM	CHECKED BY:	MRB	APPROVED BY:	MRB	FIGURE NO.:	1
DATE:	APR. 2014	DWG SCALE:	NONE	PROJECT NO:	121-337		

P:\2013\131-178\CADD\Dwg\Incident Management Plan (IMP)\121337-E200.dwg FIG 2} LS:(24/04/2014 - mpeake) - LP: 5/2/2014 2:14 PM



NOTE

1. A THIRD ALTERNATE COMMAND CENTER (IF REQUIRED) WOULD BE LOCATED AT THE PATTONVILLE FIRE PROTECTION DISTRICT ADMINISTRATIVE OFFICE AT 13900 ST. CHARLES ROCK ROAD.

REFERENCE

SOURCE: Google Earth Pro © 2012 Google



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BRIDGETON LANDFILL, LLC
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MISSOURI

FACILITY MAP

DRAWN BY:	JMM	CHECKED BY:	MRB	APPROVED BY:	MRB	FIGURE NO.:	2
DATE:	APR. 2014	DWG SCALE:	NONE	PROJECT NO:	121-337		

\\SVR-DETROIT\PROJECTS\2013\131-178-CADD\DWG\INCIDENT MANAGEMENT PLAN (IMP)\121337-E300.DWG\FIG 3} LS:(MATT.KNUTH - 6/8/2015 4:43:19 PM) - LP: 6/8/2015 5:16:48 PM



"QUADRANT" DESIGNATIONS

- (A) = SOUTH QUARRY - NE QUADRANT
- (B) = SOUTH QUARRY - SE QUADRANT
- (C) = SOUTH QUARRY - SW QUADRANT
- (D) = SOUTH QUARRY - NW QUADRANT
- (E) = NORTH QUARRY AREA

NOTE

1. A THIRD ALTERNATE COMMAND CENTER (IF REQUIRED) WOULD BE LOCATED AT THE PATTONVILLE FIRE PROTECTION DISTRICT ADMINISTRATIVE OFFICE AT 13900 ST. CHARLES ROCK ROAD.

LEGEND

BULK STORAGE CONTAINERS (ALL OUTDOORS)

- 1 [Yellow Box] - ABOVEGROUND DIESEL FUEL STORAGE TANK - 500 GAL
- 2 [Yellow Box] - ABOVEGROUND DIESEL FUEL STORAGE TANK - 500 GAL
- 3 [Yellow Box] - ABOVEGROUND DIESEL FUEL STORAGE TANK - 500 GAL
- 4 [Yellow Box] - ABOVEGROUND DIESEL FUEL STORAGE TANK - 500 GAL
- 5 [Yellow Box] - ABOVEGROUND DIESEL FUEL STORAGE TANK - 500 GAL
- 6 [Orange Box] - ABOVEGROUND GASOLINE FUEL STORAGE TANK - 30 GAL
- 7 [Blue Box] - PROPANE STORAGE TANK - 100 LB
- 8 [Blue Box] - PROPANE STORAGE TANK - 100 LB
- 9 [Blue Box] - PROPANE STORAGE TANK - 100 LB
- 10 [Blue Box] - PROPANE STORAGE TANK - 100 LB
- 11 [Blue Box] - PROPANE STORAGE TANK - 100 LB
- 12 [Blue Box] - PROPANE STORAGE TANK - 100 LB
- 13 [Blue Box] - PROPANE STORAGE TANK - 100 LB

- [Green Circle with Blue Arrow] - EXISTING YARD HYDRANT AND FIRE HYDRANT
- [Yellow Line] - NATURAL GAS LINE
- [Red Line] - ABOVEGROUND ELECTRIC LINE
- [Red Square] - POWER SUPPLY PANEL
- [Green Shaded Area] - ON-SITE ALL-WEATHER ROADS AND STAGING AREAS ACCESSIBLE BY PUBLIC EMERGENCY RESPONSE
- [Yellow Shaded Area] - ON-SITE ALL-WEATHER ROADS ACCESSIBLE BY BRIDGETON LANDFILL EQUIPMENT

INCIDENT MANAGEMENT PLAN (IMP)		BRIDGETON LANDFILL
SITE ACCESS AND OPERATIONS		
JUNE 2015	1" = 300'	FIGURE 3

\\SVR-DETROIT\PROJECTS\2013\131-178-CADD\DWG\INCIDENT MANAGEMENT PLAN (IMP)\121337-E300.DWG\FIG 3A\ LS:(MATT.KNUTH - 6/8/2015 4:43:19 PM) - LP: 6/8/2015 5:19:29 PM



"QUADRANT" DESIGNATIONS

- (A)** = SOUTH QUARRY - NE QUADRANT
- (B)** = SOUTH QUARRY - SE QUADRANT
- (C)** = SOUTH QUARRY - SW QUADRANT
- (D)** = SOUTH QUARRY - NW QUADRANT
- (E)** = NORTH QUARRY AREA

LEGEND

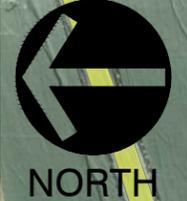
- EXISTING YARD HYDRANT AND FIRE HYDRANT
- ON-SITE ALL-WEATHER ROADS AND STAGING AREAS ACCESSIBLE BY PUBLIC EMERGENCY RESPONSE
- ON-SITE ALL-WEATHER ROADS ACCESSIBLE BY BRIDGETON LANDFILL EQUIPMENT

NOTE

1. A THIRD ALTERNATE COMMAND CENTER (IF REQUIRED) WOULD BE LOCATED AT THE PATTONVILLE FIRE PROTECTION DISTRICT ADMINISTRATIVE OFFICE AT 13900 ST. CHARLES ROCK ROAD.

INCIDENT MANAGEMENT PLAN (IMP)		BRIDGETON LANDFILL
EMERGENCY LOCATOR MAP		
JUNE 2015	1" = 300'	FIGURE 3A

LEACHATE TREATMENT AREA



LEGEND

BULK STORAGE CONTAINERS

- 1 ● - HYDRITE 3120 SUPPRESSOR - 330 GAL
- 2 ● - HYDRITE 3120 SUPPRESSOR - 330 GAL
- 3 ● - HYDRITE 3120 SUPPRESSOR - 330 GAL
- 4 ● - HYDRITE 3120 SUPPRESSOR - 330 GAL
- 5 ● - HYDRITE 3120 SUPPRESSOR - 330 GAL
- 6 ● - SODIUM HYPOCHLORITE - 330 GAL
- 7 ● - SODIUM HYPOCHLORITE - 330 GAL
- 8 ● - SODIUM HYPOCHLORITE - 330 GAL
- 9 ● - COAGULANT - 55 GAL
- 10 ● - COAGULANT - 55 GAL
- 11 ● - COAGULANT - 55 GAL
- 12 ● - HYDROGEN PEROXIDE 32% - 55 GAL
- 13 ● - POLYMER - 55 GAL
- 14 ● - PHOSPHORIC ACID 75% - 55 GAL
- 15 ● - HYDROGEN PEROXIDE 32% - 55 GAL
- 16 ● - SODIUM HYPOCHLORITE - 330 GAL
- 17 ● - GOC TECHNOLOGIES 0900 ODOR COUNTERACTANT - 330 GAL
- 18 ● - FERRIC CHLORIDE - 330 GAL
- 19 ● - GOC TECHNOLOGIES 0900 ODOR COUNTERACTANT - 330 GAL
- 20 ● - PHOSPHORIC ACID 75% - 55 GAL
- 21 ● - GOC TECHNOLOGIES 0900 ODOR COUNTERACTANT - 500 GAL
- 22 ● - SODIUM HYDROXIDE (CAUSTIC) - 330 GAL
- 27 ● - SODIUM HYDROXIDE (CAUSTIC) - 6,000 GAL
- 28 ● - SODIUM HYDROXIDE (CAUSTIC) - 6,000 GAL
- 29 ● - SODIUM HYDROXIDE (CAUSTIC) - 6,000 GAL
- 30 ● - SULFURIC ACID (ACID) - 6,000 GAL
- 31 ● - MAGNESIUM HYDROXIDE (CAUSTIC) - 6,000 GAL
- 32 ● - ALUMINUM CHLORIDE HYDROXIDE - 6,000 GAL
- 33 ● - UF MEMBRANE CLEANER - 55 GAL
- 34 ● - COAGULANT (POLYMER) - 330 GAL
- 35 ● - COAGULANT (POLYMER) - 330 GAL
- 36 ● - ANTIFOAM - 330 GAL
- 37 ● - PHOSPHORIC ACID - 330 GAL
- 38 ● - SALT (NaCl) - 55 GAL (OR 50 LB BAGS)
- 39 ● - BIOCIDES (BROMINE & SODIUM HYPOCHLORITE/HYDROXIDE) - 55 GAL
- 40 ● - CORROSION/SCALE INHIBITOR - 55 GAL
- 41 ● - SODA ASH SILO - 60,000 LBS

GENERAL LEGEND

- ON-SITE ALL-WEATHER ROADS AND STAGING AREAS ACCESSIBLE BY PUBLIC EMERGENCY RESPONSE
- ON-SITE ALL-WEATHER ROADS ACCESSIBLE BY BRIDGETON LANDFILL EQUIPMENT
- NATURAL GAS LINE
- ELECTRIC LINE
- POWER SUPPLY PANEL
- 55 GALLON CONTAINER
- BULK CONTAINER (>55 GAL)

NOTES

1. A THIRD ALTERNATE COMMAND CENTER (IF REQUIRED) WOULD BE LOCATED AT THE PATTONVILLE FIRE PROTECTION DISTRICT ADMINISTRATIVE OFFICE AT 13900 ST. CHARLES ROCK ROAD.
2. THE LEACHATE TREATMENT AREA DEPICTED DOES CONTAIN 100 LB PROPANE FUEL TANKS AND 500 GAL DIESEL FUEL TANKS (SEE FIGURE 3 FOR MORE DETAILS).

KEY

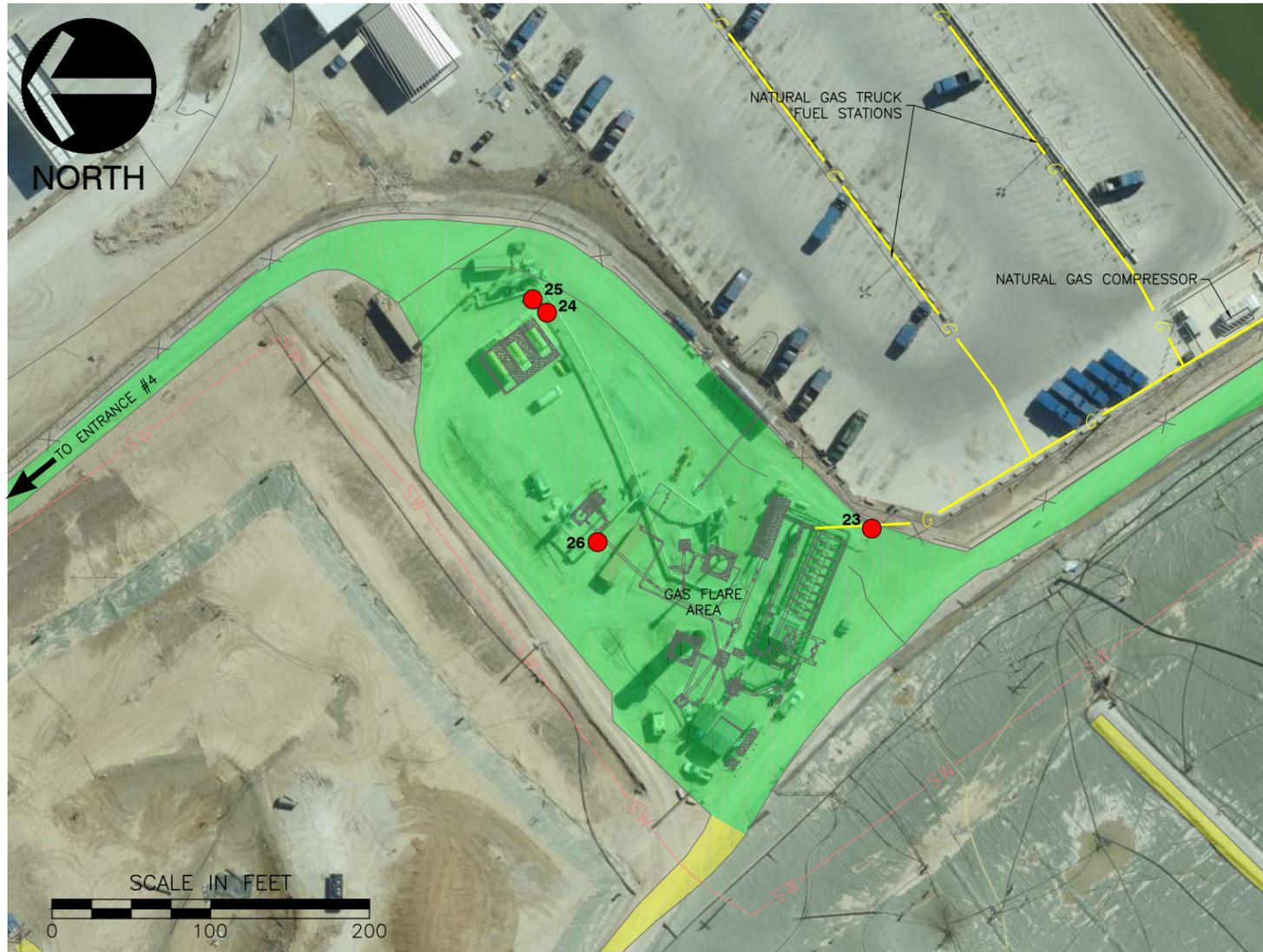


INCIDENT MANAGEMENT PLAN (IMP)		BRIDGETON LANDFILL
CHEMICAL STORAGE AREAS		
JUNE 2015	1" = 100'	FIGURE 4A

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\\SVP-DETROIT\PROJECTS\2013\131-178\ -CADD\DWG\INCIDENT MANAGEMENT PLAN (IMP)\121337-E300.DWG(FIG 4B) LS:(MATT.KNUUTH - 6/8/2015 4:43:19 PM) - LP: 6/8/2015 5:32:31 PM

GAS FLARE COMPOUND



LEGEND

BULK STORAGE CONTAINERS

- 23 ● - GOC TECHNOLOGIES 0900 ODOR COUNTERACTANT - 500 GAL
- 24 ● - GOC TECHNOLOGIES 0900 ODOR COUNTERACTANT - 330 GAL
- 25 ● - GOC TECHNOLOGIES 0900 ODOR COUNTERACTANT - 330 GAL
- 26 ● - HYDRITE 3120 SUPPRESSOR - 330 GAL

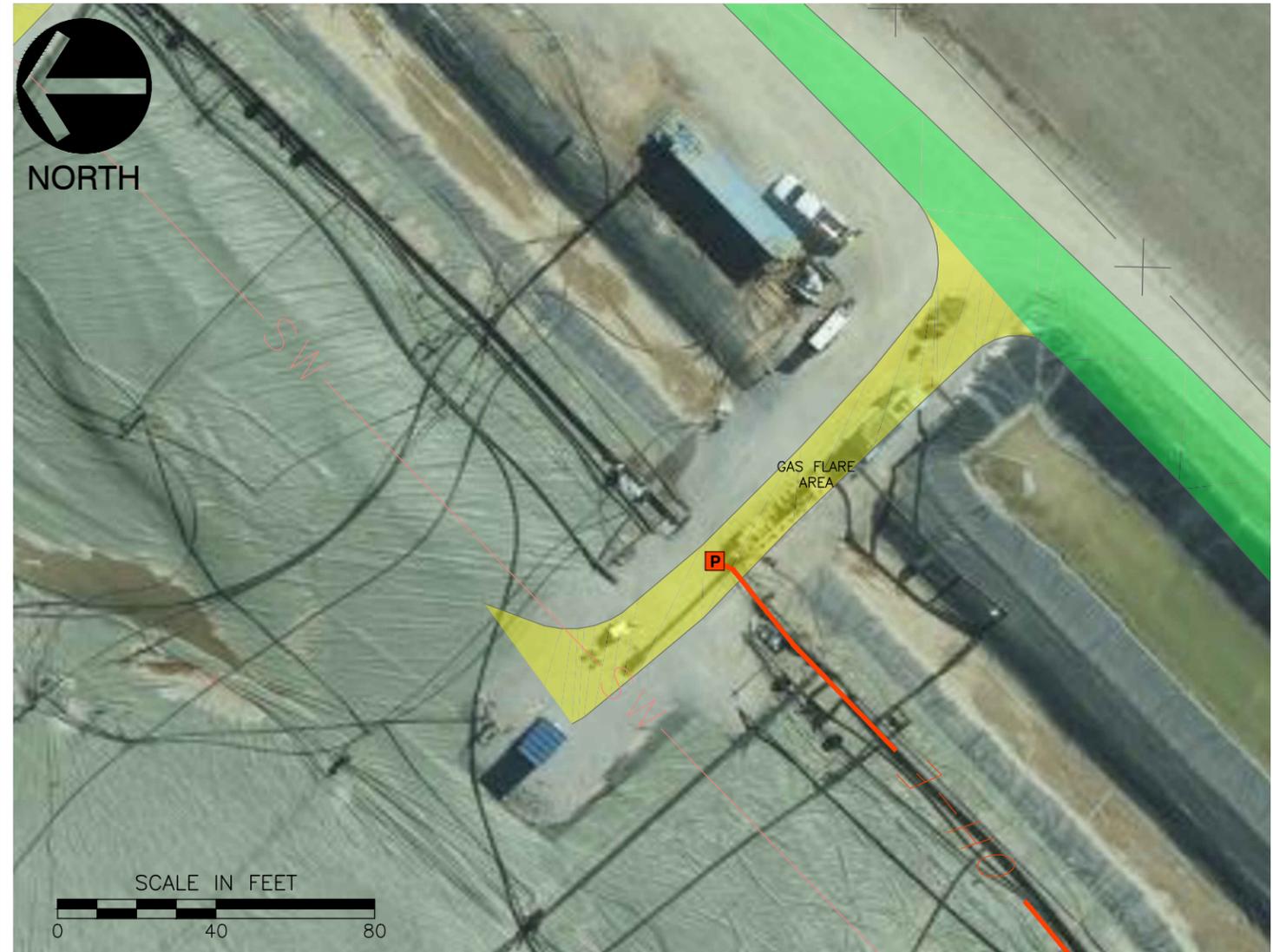
GENERAL LEGEND

- ON-SITE ALL-WEATHER ROADS AND STAGING AREAS ACCESSIBLE BY PUBLIC EMERGENCY RESPONSE
- ON-SITE ALL-WEATHER ROADS ACCESSIBLE BY BRIDGETON LANDFILL EQUIPMENT
- NATURAL GAS LINE
- OH-E - ELECTRIC LINE
- P - POWER SUPPLY PANEL
- 15 ● - 55 GALLON CONTAINER
- 16 ● - BULK CONTAINER (>55 GAL)

NOTES

1. A THIRD ALTERNATE COMMAND CENTER (IF REQUIRED) WOULD BE LOCATED AT THE PATTONVILLE FIRE PROTECTION DISTRICT ADMINISTRATIVE OFFICE AT 13900 ST. CHARLES ROCK ROAD.
2. BOTH GAS FLARE AREAS DEPICTED ABOVE DO CONTAIN 100 LB PROPANE FUEL TANKS (SEE FIGURE 3 FOR MORE DETAILS).

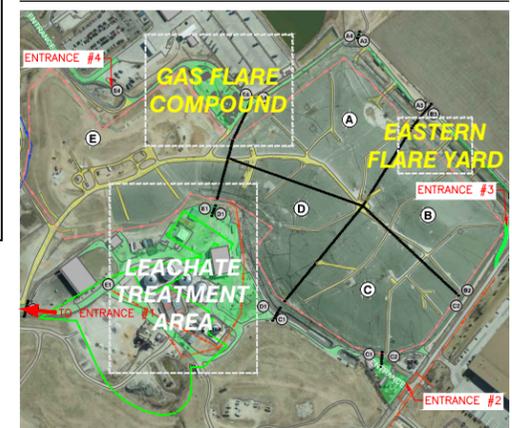
EASTERN FLARE YARD



LEGEND

NO BULK STORAGE CONTAINERS

KEY



INCIDENT MANAGEMENT PLAN (IMP)		BRIDGETON LANDFILL
CHEMICAL STORAGE AREAS		
JUNE 2015	SCALE VARIES	FIGURE 4B

ATTACHMENT A

**FACILITY EMERGENCY COORDINATOR CHECKLIST / EMERGENCY
RESPONDER COMMUNICATION**

BRIDGETON LANDFILL

Incident Management Plan

FACILITY EMERGENCY COORDINATOR CHECKLIST / EMERGENCY RESPONDER COMMUNICATION

- a. Make initial classification and categorize incident
- b. Initiate proper response strategy (Section 5). For notifications, collect the following information and communicate it to notified parties:
 - Location of the incident (by Quadrant)
 - Gate location closest to the incident
 - Incident Type and Level (0 or 1)
- c. Account for facility personnel
- d. Assure appropriate access gates are open
- e. Determine if environmental release is occurring and contain
- f. Restore and resume normal operation

INCIDENT DETAIL

Date and Time of Incident: _____

Facility Coordinator: _____

Description of Incident: _____

Date and Time Resume Normal Activity: _____

ATTACHMENT B

SPILL PREVENTION AND RESPONSE FOR LEACHATE

Spill Prevention and Response for Leachate

Spill Prevention

Leachate is collected from wells and collection sumps throughout the landfill. The leachate is piped to collection tanks either directly or via internal lift station. There are currently two internal lift stations. Under normal operations, leachate is collected in Tank 1 (one of four 1-million gallon tanks), treated in in the 316K tank and then stored in Tank 2 for load out. Tanks 3 and 4 and the 96 tank are available for additional storage capacity of leachate either before or after treatment. Treated leachate is transferred to hauling trucks at the Leachate Loadout station. Table 1 lists of the devices and practices in place to prevent spills of leachate.

Table 1 Spill Prevention Devices and Practices

Spill Prevention Devices and Practices	96K Tank	316K and 1M Tanks	Frac Tanks	Pumps and Lift Stations	Leachate Piping	Truck Load Out Station
SCADA level sensor	*	*		*	NA	NA
Minimum freeboard	*	*	*		NA	NA
High level alarm light	*	*		*	NA	NA
Overfill prevention feed shutoffs				*		
Bypass valves	*			*		
Secondary tank containment	*	*	* ¹	*	NA	*
Dual containment piping	*	*	*	*	*	*
Pumps turned off during maintenance	*	*	*	*	*	*
Dry disconnect couplings	NA	NA	*	NA	NA	
Drip pans	NA	NA	*	NA	*	NA
Vac Truck available to clean containment	*	*	*	*	*	*
Daily inspection	*	*	*	*	*	* ²

¹Buffer tank farm has clay berm. Sparge units have no secondary containment but have been deactivated.

²Loading is monitored continuously by driver

Leachate Piping

- All leachate conveyance piping is dual containment with the exception of the pressurized well manifolds. This piping lies entirely on top of flexible membrane line and is connected to dual containment sumps. Single walled piping may be used in temporary applications when necessary.
- There are no hose flanges or connections in piping. The only connections are at pumps, valves and the tanks, all of which have containment systems.

- During maintenance involving pipe disconnection, pipes are vacuumed with a vac truck as needed to avoid spillage; there are two vac trucks on site.
- Drip pans are used as needed during pipe disconnection during maintenance.

Leachate Pumps and Lift Station

- Each lift station is equipped with a high level alarm that activates a second pump to reduce volume quickly. If necessary, a second high-high level alarm triggers an automatic by-pass of the lift station and sends leachate directly to Tank 1.
- The lift stations and LCSs are equipped with SCADA monitoring and controls.
- Pumps and valve connections are within dual containment vaults.
- During maintenance, affected pumps are shut off and/or squeeze-off tools/valves are used to redirect leachate.
- After maintenance, leachate is removed from vaults and containments with a vacuum truck.

316K and 1M Tanks

- Tanks are in secondary containment systems capable of holding 110% of the capacity of the tank.
- Tank filling is conducted manually by on/off switch at the control panel and is monitored by staff on site 24 hours, 7 days per week.
- Tanks are monitored via SCADA equipment. Additional analogue gauges are being installed.
- There is a 22' maximum fill height; when freeboard is exceeded, the SCADA displays a high level on-screen alarm.
- The SCADA system is designed to generate a phone or email message to designated users when high level is reached. This feature is under development and not yet implemented.
- There is a high-level alarm light on the SCADA panel at the tank.
- Tank and containment are inspected daily; staff are on site 24 hours, 7 days per week.

96K Tank

- The tank has a secondary containment system capable of holding 110% of the capacity of the tank.
- There is an overflow bypass system to the secondary containment with a sump to the MSD lift station (currently incapacitated).
- Tank filling is conducted manually by on/off switch at the control panel and is monitored by staff on site 24 hours, 7 days per week.
- Tanks are monitored via SCADA equipment.
- There is a 29'1" feet maximum fill height; when freeboard is exceeded, the SCADA displays a high level on-screen alarm.
- The SCADA system is designed to generate a phone or email message to designated users when high level is reached. This feature is under development and not yet implemented.
- The Tank has a high level light on the control panel.
- The Tank and containment are inspected daily and staff are on site 24 hours, 7 days per week.

Truck Leachate Loadout Station

- Leachate loading station has a concrete containment.
- The containment drains to a sump pump that pumps liquid back to the 316K tank.
- Truck leachate loading is monitored continuously by driver in overhead safety cage; engineering controls prevent the driver from leaving the area during filling.

Frac Tanks

- Regular use of frac tanks has been discontinued. All frac tanks on site are in the process of being emptied and decommissioned.
- Each frac tank has an isolation/shut off valve.
- The buffer tank farm has a clay containment berm and on-site vac trucks to enable quick response to remove any spills.
- During piping changes or maintenance, pipes are vacuumed with a vac truck to avoid spillage.

Spill Response

Prevent Additional Release

If there is a release of leachate from a tank, container, piping, secondary containment or other equipment, or if any equipment that is used for managing leachate which becomes unfit for use, the equipment must be removed from service as soon as safely practicable.

In the event of a failure of equipment, landfill technicians or contract leachate workers under the supervision of a landfill Environmental Specialist/Manager will immediately take steps to shut off pumps and valves as necessary to relieve pressure from the affected tank or line and isolate it from the rest of the system.

If the landfill stops operations in response to a fire, explosion, or release, the Facility Emergency Coordinator or his designee must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes or other equipment, wherever this is appropriate.

If the release is from a tank or container, waste must be removed to prevent further release to the environment and to allow inspection and repair of the vessel.

Immediately or as soon as safely possible, take steps to prevent further migration of the release. If a release is contained within a secondary containment system, all released leachate must be removed within 24 hours or in as timely a manner as is practicable to prevent harm to human health and the environment. All recovered leachate must be treated, stored, and disposed to prevent further release or exposure and insure compliance with applicable regulations.

Notification

In addition to the notifications described in the flow diagram titled "Incident Leachate Release" the Facility Emergency Coordinator will submit a written report within 15 days after any Level 1 incident to the Missouri DNR. The report must contain the following:

- Name, address, and telephone number of the facility,
- Date, time, and type of incident (e.g. surface fire, explosion),
- Quantity of leachate involved,
- Extent of injuries, if any,
- An assessment of actual or potential hazards to human health or the environment, where this is applicable,
- Disposition of leachate,
- Likely route of migration of the release,
- Description of response actions taken or planned,
- Characteristics of the surrounding soil (soil composition, geology, hydrogeology, (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Missouri DNR as soon as they become available; and
- Proximity to downgradient drinking water, surface water, and population areas.

Assessment, Containment and Immediate Cleanup

For any release of leachate to the ground, regardless of whether it is contained in the stormwater collection system, the Facility Emergency Coordinator (or designee when the Facility Emergency Coordinator is on call) must immediately:

- Identify the exact source, amount, and extent of any released leachate,
- Assess possible hazards to human health or the environment that may result from the release,
- Activate internal facility alarms or communication systems, for Level 1 release,
- Notify appropriate state or local agencies,
- Clean up – Small Spill. For small spills or leaks that are not likely to migrate offsite, sorbent pads and granular spill sorbent and containers will be used. Shovels, and if necessary, a front loader are available to remove contaminated sorbent and place it in appropriate containers for characterization and proper disposal,
- Clean up – Large Spill. In the event of a significant release to the ground, including to the storm water collection system, crews will place the steel gate over the mouth of the culvert and place the fill materials to seal it and prevent further migration of liquids. Crews will immediately mobilize an onsite vacuum truck to remove liquids from the stormwater collection system. Any visible contamination of soil or surface water will be removed and stored in on-site tanks or containers for characterization prior to disposal. Should any leachate migrate past the culvert, they would drain to a stormwater detention basin where they will be removed as soon as possible using vacuum truck or pump, and placed in tanks or containers for proper characterization and disposal. If necessary, create berms within the stormwater detention basin to isolate the leachate and limit mixing with stormwater to the extent possible.

ATTACHMENT C

**MSDS
(Provided Separately)**
